

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) An amplifier comprising:
 - a. a power terminal;
 - b. a load transistor having a first load terminal connected to the power terminal, a second load terminal, and a load-control terminal;
 - c. an input transistor having a first current-handling terminal connected to the second load terminal, a second current-handling terminal, and an input-transistor control terminal; [[and]]
 - d. an inductor having a first inductor terminal connected to the load-control terminal and a second inductor terminal connected to the second load terminal[[]]
 - e. a second inductor connected between the second inductor terminal and the second load terminal; and
 - f. a resistor connected between the power terminal and the second inductor terminal.

Claims 2-3 (Cancelled)

4. (Original) The amplifier of claim 1, wherein the first current-handling terminal of the input transistor connects to the second load terminal via a resistor.
5. (Original) The amplifier of claim 1, wherein the first current-handling terminal of the input transistor connects to the second load terminal via a calibrated resistance, the calibrated resistance comprising a third transistor having a third current-handling terminal connected to the first current-handling terminal of the input transistor, a fourth current-handling terminal connected to the second load terminal, and a resistance-control terminal.

6. (Original) The amplifier of claim 5, further comprising a calibration circuit adapted to provide a control voltage on a calibration-circuit output terminal connected to the resistance-control terminal.
7. (Original) The amplifier of claim 6, wherein the calibration circuit comprises:
 - a. a reference resistor adapted to conduct a reference current;
 - b. a fourth transistor adapted to conduct a second current and having a first current-handling terminal, a second current-handling terminal, and a control terminal; and
 - c. a differential amplifier having:
 - i. a first differential input terminal adapted to receive a first input signal of a first magnitude proportional to the reference current;
 - ii. a second differential input terminal adapted to receive a second input signal of a second magnitude proportional to the second current; and
 - iii. a differential-amplifier output terminal connected to the resistance-control terminal.
8. (Original) The amplifier of claim 7, wherein the differential-amplifier output terminal connects to the control terminal of the fourth transistor.
9. (Original) An amplifier comprising:
 - a. first and second power-supply terminals;
 - b. a current source having a current-source input terminal and a current-source output terminal connected to the first power-supply terminal;
 - c. a first input transistor having a first current-handling terminal connected to the current-source input terminal, a second current-handling terminal, and a first control terminal;

- d. a second input transistor having a third current-handling terminal connected to the current-source input terminal, a fourth current-handling terminal, and a second control terminal;
 - e. a first resistor having first and second resistor terminals, the first resistor terminal connected to the second current-handling terminal;
 - f. a second resistor having third and fourth resistor terminals, the third resistor terminal connected to the fourth current-handling terminal;
 - g. a first load transistor having a first load terminal connected to the second power-supply terminal, a second load terminal connected to the second resistor terminal, and a first load-control terminal connected to the fourth resistor terminal;
 - h. a second load transistor having a third load terminal connected to the second power-supply terminal, a fourth load terminal connected to the fourth resistor terminal, and a second load-control terminal connected to the second resistor terminal;
 - i. a third resistor having a fifth resistor terminal connected to the second power-supply terminal and a sixth resistor terminal;
 - j. a first inductor connected between the second and sixth resistor terminals; and
 - k. a second inductor connected between the fourth and sixth resistor terminals.
10. (Original) The amplifier of claim 9, further comprising a differential output stage having a first differential input terminal connected to the second current-handling terminal and a second differential input terminal connected to the fourth current-handling terminal.
11. (Original) The amplifier of claim 9, wherein the transistors are MOS transistors.

12. (Original) The amplifier of claim 11, wherein the load transistors are PMOS transistors.
13. (Original) The amplifier of claim 9, wherein the third resistor is of a value selected so the first and second load transistors operate in saturation.
14. (Original) The amplifier of claim 9, wherein the geometries of the load transistors and inductors are selected to provide a resonant frequency of about 5GHz.
15. (Original) The amplifier of claim 1, wherein the inductor comprises a coil.

Claims 16-41 (Cancelled)